

Self-pressurized Series for LN₂ Storage and Supply



Scope of Application

Liquid Nitrogen Supplement Series for LN₂ Storage and Supply incorporates the latest innovation, its unique design utilises the pressure generated from the vapourisation of a small amount liquid nitrogen to discharge LN₂ into other containers. Storage capacities range from 5 to 500 litres.

Innovative Design

- Decant Valves
- Integral Safety Mechanisms
- 5 Year Vacuum Warranty
- Stainless Steel Construction
- Liquid Storage
- Pressure Raising

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Key Features

- All models are equipped with safety valves
- All welded stainless steel construction
- Rotary ring construction
- Labelled valves for easy identification
- 5 year vacuum warranty

Product Advantages

Stainless Steel Structure

Stainless steel structure can withstand the most demanding environment and ensure long-lasting security. It also provides reduced evaporation loss rate, compared with conventional welding insulation tanks.

Casters

All models have four casters for better mobility and convenient use in different occasions.

Variety of Accessories

Each Self-pressurized Series for LN₂ Storage and Supply model is equipped with a pressure valve, a drain valve, a relief valve, and a pressure gauge.

Accessories

Transfer Hose



Float-type Liquidometer



Additional Series for Liquid Nitrogen Tank

(Comparison between Standard Series and K Series)

Standard series



K series



New Functions of K Series

Digital Display Level Gauge

DLZ-300
Digital display of fluid level
Remote data transmission
function



Large diameter vent valve

Rapid relief of
over pressure
Protection of
safety valve



Pressure stabilizing valve

Stabilize fluid pressure
during auto filling



Technical Parameters



Model	YDZ-5 —	YDZ-15 —	YDZ-30 —	YDZ-50 —	YDZ-100 YDZ-100K
Performance					
Volume of LN ₂ (L)	5	15	30	50	100
Static Evaporation (L/Day)	0.15	0.38	0.75	1	1.3
LN ₂ Output (L/Min)	2	2	3	3	4
Dimensions					
Height (mm)	510	750	879	991	1185
Outside Diameter (mm)	329	404	454	506	606
Empty Weight (kg)	15	23	32	54	75
Full Weight (kg)	19.1	35.3	56.6	95.0	157.0
Shipping Weight (kg)	28	34	47	63	98
Pressure Parameters (MPA)	1. Standard working pressure 0.05, 2. Maximum working pressure 0.09, 3. First stage safety valve relief pressure 0.099, 4. Second stage safety valve release pressure 0.15, 5. Pressure gauge range 0-0.25				

Model	YDZ-150 —	YDZ-200 YDZ-200K	YDZ-240K —	YDZ-300 YDZ-300K	YDZ-500 YDZ-500K
Performance					
LN ₂ Capacity (L)	150	200	240	300	500
Static Evaporation (L/Day)	1.95	2.4	2.9	3.3	5.5
LN ₂ Output (L/Min)	6	8	8	8	10
Dimensions					
Height (mm)	1188	1265	1350	1459	1576
Outside Diameter (mm)	706	758	758	857	1008
Empty Weight (kg)	102	130	148	202	255
Full Weight (kg)	225	296	350	448	665
Shipping Weight (kg)	132	164	177	232	324
Pressure Parameters (MPA)	1. Standard working pressure 0.05, 2. Maximum working pressure 0.09, 3. First stage safety valve relief pressure 0.099, 4. Second stage safety valve release pressure 0.15, 5. Pressure gauge range 0-0.25, 6. Rupture disc burst pressure 0.47.				

* Static evaporation and static holding time are theoretical values. Actual evaporation and holding time are affected by usage, atmospheric conditions and manufacturing tolerances.

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Product List



Model	Product	Model	Description and Accessories
YDZ	Self-pressurized Filling Tank	YDZ-5	Includes transfer hoses (ZG-DN10/1.5)
	Self-pressurized Filling Tank	YDZ-15	
	Self-pressurized Filling Tank	YDZ-30	Includes transfer hoses (ZG-DN10/1.5)
	Self-pressurized Filling Tank	YDZ-50	
	Self-pressurized Filling Tank	YDZ-100	Includes transfer hoses (ZG-DN10/1.5) and float-type liquidometer
	Self-pressurized Filling Tank	YDZ-150	
	Self-pressurized Filling Tank	YDZ-200	
	Self-pressurized Filling Tank	YDZ-300	
	Self-pressurized Filling Tank	YDZ-500	
	Self-pressurized Filling Tank	YDZ-100K	Includes transfer hoses (ZG-DN10/1.5), Digital display level gauge (DLZ-300) and pressure stabilizer. Having the function of remote transmission of liquid level data, can be used for automatic filling
	Self-pressurized Filling Tank	YDZ-200K	
	Self-pressurized Filling Tank	YDZ-240K	
	Self-pressurized Filling Tank	YDZ-300K	
	Self-pressurized Filling Tank	YDZ-320K	
	Self-pressurized Filling Tank	YDZ-500K	
Accessories	Digital Display Level Gauge	DLZ-300 (YDZ-100K)	Digital display real time liquid nitrogen percentage of self pressurized tank, low power consumption, wireless transmission; (YDZ-100K)
	Digital Display Level Gauge	DLZ-300 (YDZ-200K)	Digital display real time liquid nitrogen percentage of self pressurized tank, low power consumption, wireless transmission; (YDZ-200K)
	Digital Display Level Gauge	DLZ-300 (YDZ-240K)	Digital display real time liquid nitrogen percentage of self pressurized tank, low power consumption, wireless transmission; (YDZ-240K)
	Digital Display Level Gauge	DLZ-300 (YDZ-300K)	Digital display real time liquid nitrogen percentage of self pressurized tank, low power consumption, wireless transmission; (YDZ-300K)
	Digital Display Level Gauge	DLZ-300 (YDZ-320K)	Digital display real time liquid nitrogen percentage of self pressurized tank, low power consumption, wireless transmission; (YDZ-320K)
	Digital Display Level Gauge	DLZ-300 (YDZ-500K)	Digital display real time liquid nitrogen percentage of self pressurized tank, low power consumption, wireless transmission; (YDZ-500K)
	Float-type Liquidometer	FZ-100	Suitable for YDZ-100
	Float-type Liquidometer	FZ-150	Suitable for YDZ-150
	Float-type Liquidometer	FZ-200	Suitable for YDZ-200
	Float-type Liquidometer	FZ-300	Suitable for YDZ-300
	Float-type Liquidometer	FZ-500	Suitable for YDZ-500
	Single-layer Transfusion Hose	ZG-DN10/1.5	Diameter10mm, length 1.5m, suitable for YDZ series

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Model	Product	Model	Description and Accessories
Cryobox	Vial Cane	(3-type)	Used to hold 3 vials (2ml)
	Vial Cane	(6-type)	Used to hold 6 vials (2ml)
	Plastic Cryo Box	5*5(2.0)	Used to store 1.8ml / 2ml vial (25 holes)
	Plastic Cryo Box	9*9(2.0)	Used to store 1.8ml / 2ml vial (81 holes)
	Plastic Cryo Box	9*9 (5.0)	Used to store 4.5 / 4.7/5ml vial (81 holes)
	Plastic Cryo Box	10*10 (2.0)	Used to store 1.8ml/2ml vial (interally threaded,100 holes)
	Plastic Cryo Box	Y-37	Suitable for round rack to store 1.8ml/2ml vial (37 holes)
	Plastic Goblets	SNT-97	Suitable for diameter 97mm canisters
	Blood Bag Cryo Box	25ml (791 OS/U)	One bag per box, rocker arm type
	Blood Bag Cryo Box	50ml (4R9951)	One bag per box, drawer type
	Blood Bag Cryo Box	250ml (4R9953)	One bag per box, rocker arm type
	Plastic Sleeve for Vial Cane	5016-0002 (6-type)	Suitable for vial cane that can hold 6 vials
	Aluminium Cryobox	8*1 (2.0)	Used to store 1.8ml/2ml vials (8 holes)
	Stainless Steel Cryo Box	5*5 (5.0)	Used to store 4.5ml/4.7ml/5ml vials (25 holes)
	Other Accessories	Valve Adaptor	CGA295
Cryogenic Solenoid Valve		DN7.0 (ASCO 24V)	Suitable for piping pressure≤0.5MPa
Cryogenic Solenoid Valve		DN7.0 (JASA 24V)	Suitable for piping pressure≤0.5MPa
Vacuum Insulated Hose		GRG-DN10/1.0	Diameter 10mm, length 1m, special use for liquid nitrogen transferring, connection type for both side and length can be customized, charged by meter
Vacuum Insulated Hose		GRG-DN10/2.0	Diameter 10mm, length 2m, special use for liquid nitrogen transferring, connection type for both side and length can be customized, charged by meter
Transfer Hose		ZG-DN10/1.5	Diameter 10mm, length 1.5m, suitable for YDZ series
Transfer Hose		BG-DN10/1.0	Diameter 10mm, length 1.0m, suitable for liquid nitrogen pump YDB series
Transfer Hose		RG-DN10	Diameter 10mm, used for liquid nitrogen transferring, fitting and length can be customized, charged in meters.
Transfer Hose		RG-DN6	Diameter 6mm, used for liquid nitrogen transferring, fitting and length can be customized, charged in meters.
Hose Heat Insulation Cotton		BMT-DN10	Suitable for DN10 single layer metal hose, 1 meter
Cryogenic Gloves		ST-32	Overall length 320mm
Cryogenic Gloves		ST-45	Overall length 450mm
Cryogenic Gloves		ST-72	Overall length 720mm
Level Measuring Scale		YWC-100	Measuring length 1000mm

Product appearance and specifications are subject to change without notice